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ABSTRACT

This study examined college faculty workloads within the context of accountability. The report first provides an overview of the current structure of faculty workload; second, presents the findings of one specific faculty teaching and workload study conducted in Arizona; third, discusses the implications for higher education policy derived from the Arizona case study; and fourth, suggests some incentives for changing faculty workload. The Arizona study of 2,580 full-time faculty showed that ranked faculty generally taught at the upper and graduate course levels, and that, due to this distribution, other teaching personnel such as graduate assistants and adjunct faculty spend proportionately more time overall in regular scheduled classes than do ranked faculty. Study findings indicated that faculty worked an average of 56.3 hours per week; that instruction and class preparation constituted just under 50 percent of faculty workload; and that research and creative activity occupied one-third of faculty time, institutional service and administrative duties, 14 percent, and public service, 6 percent. The implications of these findings are discussed within the context of the institution's role and mission, budgetary efficiency, quality and access, and governance. The paper concludes with a brief examination of faculty workload and state-level financial support. Contains 17 references. (GLR)

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The State Higher Education Executive Officers is a nonprofit, nationwide association of the chief executive officers serving statewide coordinating boards and governing boards of postsecondary education. Forty-nine states, the District of Columbia and Puerto Rico are members.

Introduction

There is a very simple observation that comes from examining budgets of public higher education institutions: the largest component of the budget is in personnel expenditures, and faculty comprise the largest portion of total personnel expenditures. In many states public higher education employs more personnel than any other single function of state government. And since a majority of higher education's employees are faculty, this may be the single largest category of employee expense for many state governments. This fact alone would justify considerable interest on the part of state policy makers in faculty productivity.

But interest in faculty productivity runs deeper than simply the size of the financial commitment. There are widespread perceptions that faculty spend too much time doing research and too little time teaching students, particularly undergraduates. This perception was well illustrated by Layzell (1992) in his recent Chronicle of Higher Education opinion:

> Despite recent moves by some institutions to increase their emphasis on teaching, many state legislators and policy makers believe that faculty members at public colleges and universities care little about undergraduate education, especially education at the freshman and sophomore levels. Faculty members are viewed as being more concerned with graduate education and their research, publication, and other professional activities.

Have average teaching loads declined over time or is it just a bad perception on the part of state policy makers and the public? While there are no actual data that document such a decline, there are anecdotal tales from within the academy that fuel speculation about this trend. A recent editorial opinion page article written by a University of California faculty member in the Los Angeles Times asserts that average teaching loads at universities have declined over the past 10 years (Glidden 1992).

> Across the nation, teaching loads have been declining at research universities, while salaries have been rising. . . . Faculty teaching four courses in a year are perceived to have better jobs than faculty teaching six. The fewer courses taught, the greater the prestige. The explanation for this peculiar sort of competition always is the same: requisites of research require lower teaching loads. The publication of research is what faculty are paid for. Teaching is a chore.

Preliminary results from a recent study lend legitimacy to this statement. A study of tenure-track faculty at four-year institutions found an inverse relationship between time spent teaching and salary, but a direct relationship between research and publication and salary (Jacobson 1992).

The fundamental issue behind the current concern with faculty teaching loads and faculty workloads is accountability. This issue is articulated by state policy makers as a growing concern with the productivity of the academic enterprise. Given the increasingly scarce nature of state resources, policy makers want to get "the most bang for the state buck."

The Changing Concept of Accountability

Traditionally, state legislators and governors have seen accountability as a means to open higher education to public scrutiny. Those in higher education, though generally supportive of oversight, interpret accountability to mean a series of detailed information requests from state government officials generally revolving around how institutions spend state funds. This illustrates the traditional emphasis on process versus product in accountability and accountability mechanisms (Hines 1988).

However, the concept of accountability is undergoing a fundamental change from a focus on process to a focus on product. The interest in faculty teaching loads and faculty workloads reflects a concept in transition. On one hand, studies of average contact hours and hours worked per week reflect the cost accounting emphasis of the traditional concept of accountability. But

the interest in these issues is driven by concerns for quality outcomes (i.e., an increased emphasis on quality undergraduate instruction) within limited state resources, reflecting the shift toward product. The new concept of accountability also involves a re-examination of state goals and objectives for higher education (Mingle and Lenth 1989; Pettit 1991). What do states want from their colleges and universities? While this question has many answers, "quality" (whatever that is) will be the common thread running through most of the states' goals and objectives for higher education. Thus, the concept of accountability will be increasingly linked to state goals of quality outcomes in the 1990s.

The purpose of this monograph is to help frame the discussion of faculty workload within the accountability debate. There are four objectives. First, to provide some overview of the current structure of faculty workload. Second, to present the findings of one specific faculty teaching and workload study conducted in Arizona. Third, to discuss implications for higher education policy which derive from the Arizona workload study. And fourth, to suggest some incentives for changing faculty workload.

The Current Structure of Faculty Workload

Analyses of faculty workload are not new. One source notes that the first study of faculty workload occurred in 1919 (Yuker 1984). Subsequent studies of this issue have shown a fairly consistent pattern of faculty workload within the traditional tripartite workload model (instruction, research, and service). While there are variations among different types of institutions, different disciplines and faculty ranks, faculty generally report working 50-60 hours per week, with approximately one-half of the time devoted to teaching and other instructional activities.[1]

The most recent national study was conducted by the National Center for Education Statistics (NCES 1991) and had results consistent with previous studies (see Table 1). Data from this survey on the allocation of faculty time among the different workload categories indicate that for all institutions, faculty spend an average of 56% of their time in teaching activities, 16% in research, 13% in administration (e.g., institutional service), with the remainder in community service and other activities (see Figure 1). Faculty in public research and doctoral institutions are below the "all institutions" average with regard to time spent in teaching but above the average with regard to time spent in research activities. Faculty at public comprehensive institutions, on the other hand, spend proportionately more time in teaching than the average, but proportionately less time in research. The proportion of time spent in administrative activities was generally consistent across all types of institutions.

[1]Some critics of self-reported workload data use this consistency as an indictment of such data, given the variations found with regard to output indicators such as contact hours generated and number of articles published. However, some feel that the consistency over a long period of time lends validity to the results.

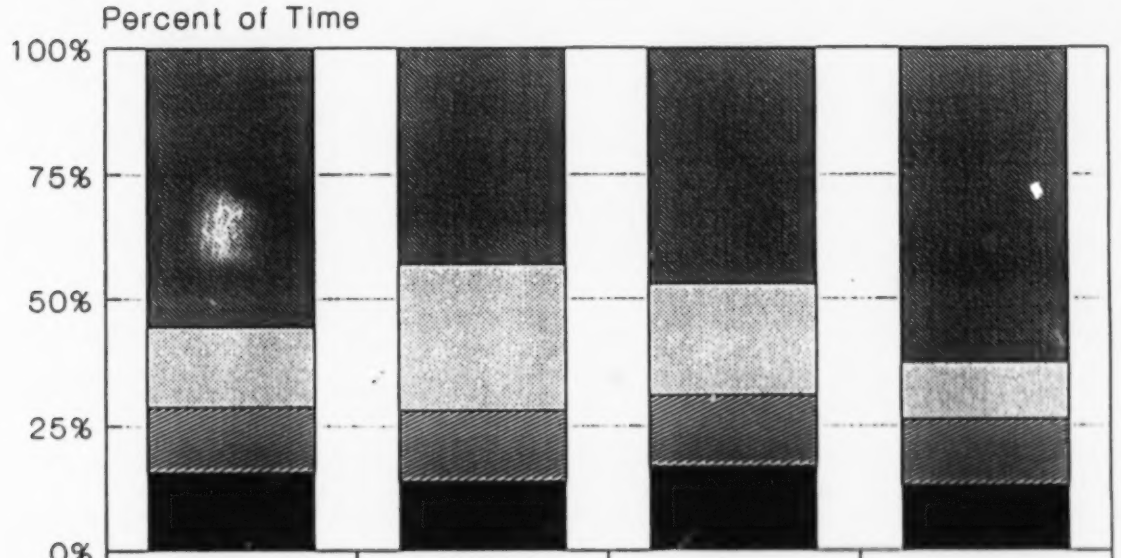
TABLE 1
Mean Hours Worked per week by Full-Time Faculty at Public Institutions, Fall 1987

Type of Institutions	Total Hours Worked
Public Research	57
Public Doctoral	55
Public Comprehensive	52
ALL INSTITUTIONS (Public & Private)	53

Source: National Center for Education Statistics

Has the distribution of faculty time among the various workload categories changed over time? Unfortunately, there is virtually no empirical basis for determining if and how the dynamics of faculty workload have changed. A recent report by the State Council of Higher Education for Virginia (1991) compared faculty survey results from 1975 and 1991 and found that the distribution of time spent in teaching, research, and service did change for faculty members at public four-year institutions in Virginia. The report indicated that for faculty at both doctoral and comprehensive institutions, the proportion of time spent in research had increased while the proportion of time spent in service activities had declined during this period. Further, faculty at doctoral institutions responding to the 1991 survey spent proportionately less time in teaching activities than their counterparts in 1975. While it would be difficult to extrapolate from this one case, it would certainly not be unreasonable to say that the Virginia study adds empirical evidence to the strongly held perception that a shift from teaching to research is occurring nationally.

FIGURE 1
PERCENT OF TIME ALLOCATED TO ACTIVITIES
FULL TIME FACULTY, FALL 1987



	All Institutions	Public Research	Public Doctoral	Public Comprehensive
Teaching	56	43	47	62
Research	16	29	22	11
Administration	13	14	14	13
All Other	16	14	17	13

Source: NCES (1991)

Note: May not add to 100 due to rounding

An Analysis of The Data on Faculty Teaching Loads

Yuker (1984) reported that course loads in the United States tend to vary from six to 15 credits. Assuming an average of three credits per course, this equates to two to five courses. His analysis of the literature also found the following variances:

- **Type of Institution**: Faculty at research-oriented universities tend to have lighter teaching loads than faculty at four-year colleges and community colleges.
- **Discipline**: Faculty in the "soft" disciplines (e.g., humanities) tend to devote more time to teaching than faculty in the "hard" disciplines (e.g., the sciences).
- **Faculty Rank:** Studies have found an inverse relationship between rank and teaching load. Full professors tend to have the lightest teaching loads while assistant professors and instructors tend to have the heaviest teaching loads.

Table 2 presents summary data on four recent studies of faculty teaching load/workload for public four-year institutions.[2] As indicated, overall average classroom hours for the four studies ranged from 7.2 hours in the Arizona study to 11.0 hours in the California State University study. These data illustrate the differences between institutional type indicated by Yuker (1984), with remarkably close averages by type. Research universities were shown to have the lowest classroom teaching loads (6.5 to 6.7 hours), while the comprehensive institutions were shown to have the highest classroom teaching loads (10.5 to 11.0 hours).

Although not indicated in the table, two of the studies also reported some variance in average teaching loads among ranks. The NCES study reported that full professors averaged 8.7 classroom hours while assistant professors and instructors averaged 9.4 hours and 13.6 hours respectively (NCES 1991). The Arizona study found that full professors had average classroom contact hours of 6.7 per teaching faculty FTE, while assistant professors had an average of 7.7 per teaching FTE (Arizona 1992).

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[2]While efforts were made to make the data comparable, it should be kept in mind that there were differences in the study methodologies and definitions which affect interpretation of the data.

TABLE 2
AVERAGE TEACHING LOADS AT PUBLIC FOUR-YEAR INSTITUTIONS
SELECTED RECENT STUDIES

State	Year of Report	Type of Public Institution	Average Weekly Classroom Hours
NCES	1991	Research Doctoral Comprehensive Weighted Mean	6.6 8.0 10.5 8.4
California	1990	Comprehensive	11.0
Virginia	1991	Research/Doctoral Comprehensive Weighted Mean	6.5 10.9 7.8
Arizona	1992	Research Doctoral Weighted Mean	6.7 9.8 7.2

Note: The California State University and Arizona studies include only ranked faculty (i.e., full, associate, and assistant professors). In addition to these three ranks, the NCES and Virginia studies include faculty at the lecturer/instructor ranks.

The Arizona Teaching and Workload Studies

In 1991 the Arizona Board of Regents initiated a two part faculty workload study through the auspices of a legislatively established Higher Education Research Advisory Board. The first component, a teaching load study, used the institutional registration systems to make a determination of the actual number of course sections and contact hours generated by faculty rank by course level. The second component, a faculty workload survey, determined how faculty spent their time in a typical week and how they would like to spend their time. The faculty workload study used a survey instrument that was distributed to all full-time faculty. The survey asked faculty to define how much time is spent during an average week on teaching, individualized instruction, class preparation/grading/advising, institutional service or admini-stration, public service, and research or other creative activity. Of the total 3,422 full-time faculty, 75.4% returned responses. A stratified sample, equivalent to 25% of the returned surveys, was used in the study.

Findings

The teaching load study found that the weighted average of classroom contact hours for faculty at all ranks was 7.2 hours, with a range from 6.0 hours at the research I university, to 9.8 hours at the limited doctoral university (see Table 2). These figures compare to the NCES published findings in August 1991 of 6.6 hours at public research universities and 8.0 hours at public doctoral universities.

Two conclusions reached by the legislative staff from the teaching load study were as follows:

> Overall, ranked faculty in the universities are more likely to teach at the upper and graduate course levels than at the introductory levels. For example, ranked faculty

accounted for 61.8% of the 300 level course sections, 69.7% of the 400 level, 74% of the 500 level but only 23.6% of the 100 level course sections and 41.6% of the 200 level.

As a result of the teaching load distribution, other teaching personnel such as graduate assistants and adjunct faculty spend proportionately more time overall in regular scheduled classes than do ranked faculty (Arizona 1992).

The statistical findings from the faculty workload study show that the allocation of faculty time in Arizona is sensitive to role and mission (See Table 3). That is, similar to the Yuker (1984) findings, faculty at the research-oriented universities had lighter teaching loads than at the comprehensive university and the converse was true for research. Second, and not surprisingly, the Arizona study found that faculty work an average of 56.3 hours per week, ranging from 57.3 hours at the research I university to 55.1 hours at the limited doctoral university. This is consistent with the 1991 NCES study which found 57 hours at public research universities and 55 hours at public doctoral universities as the workload norm. Third, the workload study was consistent with the teaching load study, reporting 8 hours per week of classroom contact, less than one hour difference from the workload study. The combination of direct classroom instruction and individualized instruction constituted 22% of the faculties' workload efforts.

Supporting the teaching effort was 14.2 hours of class preparation, including grading, office hours and advising. This second category of effort constituted 25% of faculty efforts. So the combination of instruction and class preparation was just under 50% of the faculties' total workload. The role and mission of the universities had significant influence on class preparation, with the limited doctoral faculty spending 32% of their time on class pre-paration while the research I faculty spent only 22% of their time on class preparation.

Not surprisingly, research and creative activity constituted the single largest allocation of time at 18.6 hours per week or fully one-third of the faculties' efforts. Again, role and mission had important influences in this category with the range of faculty effort extending from 12.7

hours per week, or 22% of their time, at the limited doctoral university to 21 hours per week, or 38% of their time, at the research I university.

Institutional service and administrative duties require 7.8 hours, or 14%, of faculty time each week. Role and mission does not seem to have a significant effect on this category of time allocation with less than an hour's difference among the three universities.

Finally, public service, the third component of what we traditionally consider a faculty responsibility, requires only 3.5 hours per week, 6% of the faculty effort. Faculty at the two larger urban and research universities spent more time on public service, 3.7 hours, than did faculty at the more rural limited doctoral university, 2.3 hours.

TABLE 3
ARIZONA FACULTY WORKLOAD STUDY

	Total Workload (hrs)*	Classroom Teaching (%)+	Class Preparation (%)	Individual Instruction (%)	Research/Creative (%)	Service/Administration (%)	Public Service (%)
Arizona System	56.3	15.8	24.9	6.2	33.0	13.9	6.2
University of Arizona	57.3	14.1	22.0	6.7	36.6	14.1	6.5
Arizona State University	55.6	14.7	26.0	6.3	33.3	13.0	6.7
Northern Arizona University	55.0	22.5	30.4	5.0	23.0	14.9	4.2

*minor variations due to rounding

+includes clinical instruction

SOURCE: Arizona Board of Regents and Arizona Joint Legislative Budget Committee

Implications for Higher Education Policy

What implications, if any, do these results have for higher education policy in Arizona specifically and for the faculty workload debate in general? We suggest four broad areas: (1) role and mission; (2) budgetary efficiency; (3) quality and access; and (4) governance.

The first implication is in the area of role and mission. The Arizona study reaffirms every other study that has been done on faculty workload — faculty work an average of 52 to 57 hours per week regardless of role and mission. However, role and mission clearly affects how faculty allocate their 52 to 57 hours per week. These findings suggest that governing and coordinating boards, legislative bodies and governors have a responsibility for assuring the faculty effort is going toward teaching, research and public service in a balance that meets state needs, not simply institutional aspirations. Failing this, we might as well sit aside and complacently watch as every institution slowly but steadily shifts its role and mission toward research and away from teaching.

It seems clear that we are not going to change total faculty workload. And we are not sure we would want to; 52 to 57 hours per week is well beyond the call of duty. But we surely can, and must, affect how faculty allocate their time, consistent with institutional roles and missions. The evidence points to the need to preserve and foster the teaching institution role and mission as one way to direct faculty effort toward the classroom.

For example, the Arizona Board of Regents has engaged in a major strategic direction of how to plan for an enrollment growth that will increase the number of students attending Arizona universities by 50% over the next eighteen years. At its annual planning retreat in July 1992, the Board made preliminary decisions on how to manage enrollment growth after considering an extensive number of alternatives for the delivery of academic services over the past two years. Notable was the Board's decision to focus on teaching and undergraduate education through the

creation of three relatively small four-year institutions of 10,000 students, each with a mission to provide undergraduate education and some related master's degree programs, with faculty whose work loads reflect a heavy emphasis upon instruction, and with supportive student programs. In the Decision Summary (1992) from the retreat, the Board provided important insight into its motivations when it stated:

> In so doing, the Board expresses its preference for smaller institutions, a focus on undergraduate students and a desire to control costs.

The Board did not merely opt for creating three new campuses. Rather, it made a preliminary decision that the first of these undergraduate campuses would evolve by changing the role and mission of the existing Arizona State University-West branch campus from an upper division and master's-granting institution. If implemented, the Board's preliminary decision would direct that, in consultation with the community colleges, the mission of ASU-West be revised to emphasize undergraduate education and, specifically, to include lower-division courses.

Second, and obviously related to role and mission, are the implications for budgetary efficiency. It is evident that the more faculty teach, the less total faculty is required to teach and presumably that affects total salary and benefits requirements for the budget. William Massy (SHEEO 1990) recently described a trend which he labeled as "The Ratchet". He argued that the natural desire of academic departments is to expand, specialize, and leverage faculty time with teaching and research assistants and other support staff. All of these factors combine to reduce the average faculty teaching load, which frees up faculty time for departmental research and other activities important to faculty members. There is more than a grain of truth to this theory. The budgetary ramifications of "The Ratchet" are clear: these factors result in a high unit-cost instructional delivery structure, where higher paid regular faculty have lowered teaching loads to free up time for research, while lower paid graduate assistants and adjuncts pick up the slack.

Let us provide a specific example of potentially improved budgetary efficiency using the ASU-West campus (see Table 4). When ASU-West was initially conceived as a branch of the main campus it was decided that faculty should have the same teaching load as the main campus. Consequently, faculty at ASU-West are currently scheduled to teach five classes per year, an average of 7.5 contact hours per semester for the full-time tenure track faculty. The assumption of five classes per year is more typical of a teaching load that would be expected on the research university campus which has a broad array of doctoral programs. If average faculty teaching loads increased by one class — to six classes per year, nine contact hours per semester — the total tenure track faculty requirements would decrease from 430 FTE faculty to 358 FTE faculty for 10,000 FTE students, a savings of $4.5 million in salaries and benefits per year. But we know from our own and other workload studies that average teaching loads approaching eight classes per year, 12 contact hours per semester, are more typical of a faculty who's focus is on teaching undergraduate students. Such a faculty workload at ASU-West would result in decreasing the need for tenure track faculty from 430 FTE to 268 FTE, a savings of $10.1 million per year in salaries and benefits. Multiply the savings of $10.1 million per year for each 10,000 students times three campuses of 10,000 students each, and the annual savings is $30.3 million. This is money that could be reallocated to high priority areas within the institution, such as faculty salaries.

TABLE 4
FACULTY REQUIREMENTS
10,000 STUDENT CAMPUS

	5 Classes Per Year	6 Classes Per Year	8 Classes Per Year
FTE Faculty	430	358	268
Annual Savings	N/A	$4.5M	$10.1 M

The third implication of the Arizona study affects undergraduate teaching quality, and more broadly, quality of the undergraduate experience. A number of recent publications examine the factors that contribute toward a quality undergraduate experience. We are struck in particular by the findings of Pascarella and Terenzini (1991) that suggest that individualized and small group interactions between students and faculty outside of the classroom have significant positive effects on the undergraduate experience. The opportunities for those kinds of interactions would be greatest in institutions where focus is on teaching and where faculty allocate more time to class preparation and advising. Interestingly, however, when asked how they would like to spend their time, respondents to the Arizona faculty workload survey said that, on average, they would reduce the amount of time spent in class preparation and advising by over three hours per week. Faculty would not choose to allocate that time to teaching or service, but rather would choose to spend the three hours per week on research if they could reallocate their time from present responsibilities. Faculty in the NCES survey were asked a similar question ("If you changed jobs, would you want to do less, the same, or more teaching and research?") For all institutions, 50% of the faculty would want to do more research compared with 11% wanting to do more teaching. On the other hand, only 8% would want to do less research while 30% would want to do less teaching. The responses for all public four-year institutions reflected the same patterns.

The final implication of our study is regarding governance. How will the coordinating and governing boards, working with administrations and faculties, respond to the issues which arise from workload studies? First, there will be strong pressure on coordinating and governing boards to take some action on their own to respond to issues of teaching loads and quality. In particular there will be efforts to have the boards adopt policies that require every faculty member either to teach at least one undergraduate class or a minimum number of contact hours. Indeed, a recent President's report from within the University of Arizona made a similar recom-

mendation. Absent an adequate response from coordinating and governing boards (adequate in the eyes of the legislatures), there will be efforts at legislative remedies. To this end, the Arizona Board of Regents resolved to complete its study of faculty workloads and stated that modification of faculty workload represents an efficiency to be accomplished during the next eight years. This efficiency is aimed at the existing main campuses, not new and evolving campuses.

To deal with the concern regarding teaching loads, some states have developed or are considering statutory requirements regarding faculty teaching loads at public universities. Florida, for example, has a statute that requires full-time university faculty members who are paid wholly from state funds to teach a minimum of 12 "classroom contact" hours per week. According to a September 1990 issue of Policy Perspectives, legislation enacted in New Mexico in 1990 requires each of the state's public colleges and universities to submit an annual report card that must include, among other things, the percentage of lower-division courses taught by full professors. The California Legislative Analyst's Office has suggested that in light of the state's budget problems, University of California faculty should teach one more course a year (Glidden 1992). While there may be no mass of empirical evidence regarding declining teaching loads, policy makers' perceptions are not completely unwarranted, and a failure of governing and coordinating boards to act may well result in legislative intervention. However, most higher education officials would agree that dealing with this issue through legislation is not the way to go.

The immediate problem is the underlying issue of the "publish or perish" ethic that has spread to all types of institutions. Within each institution, there is the desire to be the best. Being among the elite institutions is by and large equated with the major public research institutions, where faculty are expected to be productive scholars. Being an outstanding teacher rarely thrusts one to national prominence in his or her field of study. Within the academic culture, however, research and publication lead to positive benefits for the faculty member, the

department, the school or college, and ultimately the institution as a whole. As noted earlier, faculty would prefer to allocate more time to research. And the individual economic benefits of research and publication clearly outweigh the economic benefits of teaching. As recently noted by an administrator in the Chronicle of Higher Education:

> This [increasing the emphasis on teaching] is so delicate. It's a really intricate dance of getting people to do things that aren't necessarily in their immediate self-interest" (Jacobson 1992).

At the same time boards are considering the implications of workload studies, faculties will turn to governing and coordinating boards to be their champions and supportive of their current efforts. How each board weighs and ultimately balances these competing positions will have important consequences for our universities and colleges, both in terms of legislative and public fiscal support and in terms of faculty loyalties and morale.

Incentives For Change

Our third goal is to consider the issue of necessary incentives for a redistribution of faculty effort. Throughout the private sector the production method is being re-examined. It is time for higher education to do the same by examining the notion of scholarship and the granting of tenure based upon the individual fulfillment of the tripartite mission of teaching, research and public service. In simple terms, productivity refers to the ratio of outputs to inputs, where higher ratios reflect greater "productivity" and vice-versa. In industrial settings, productivity is relatively easy to measure: take the total product of a company (outputs) and divide by the input of choice: number of workers, number of dollars spent, etc.

Measuring productivity in higher education is a much more abstract proposition. Although inputs are relatively easy to measure (number of contact hours, total hours worked, state funds, etc.), "outcomes are diffuse and difficult to measure" (Mingle and Lenth 1989). Part of this ambiguity stems from the fact that colleges and universities are not-for-profit institutions. In a for-profit organization, profits are the goal, and the most important consideration is the cost of production. If a for-profit organization can minimize its cost of production, it can clearly increase its profits. Institutions of higher education, on the other hand, "neither minimize nor maximize costs; instead, they operate within a range of accepted norms for production relationships, such as student-faculty ratios or lab space per student for instruction" (Brinkman 1990). Focusing on such ratios allows colleges and universities to ignore the question of outcomes and of quality.

As state policy makers and those in higher education begin to wrestle with the realities of "doing more with less," the temptation will simply be (and has been) to say "teach more" or "work more hours." As was previously indicated, faculty consistently report working 50-60 hours

per week. Even if one assumes that the self-reported data are inflated by 25%, faculty would still be working 40 to 48 hours per week. Can we ask them to work more?

A related question is, can the issue of academic productivity be considered separately from the issue of quality? Under the old concept of accountability, productivity might or might not be linked to the quality issue. However, as a state's attention shifts toward quality outcomes in all areas of service delivery, the linkage between productivity and quality will have to be at the forefront. It is hard to imagine how simply working more hours or teaching more classes will result in quality teaching, research, or service outcomes. All of these activities are time-intensive. Under the tripartite workload model, it could mean watered down courses, sloppy or trite research and scholarship, and/or a non-existent service function. In short, these simplistic solutions might achieve the exact opposite of what is ultimately desired by state policy makers: high quality colleges and universities.

Multiple Tenure Tracks

How can we improve productivity? The notion of productivity implies value. Simply producing more product that is not consumed, even if more efficiently, is not being productive. In higher education, determining if someone values our product is not as direct as the simple transaction described for the private sector. But we in higher education have certainly heard from numerous sources that our research is not valued as highly as we value it, and teaching is more highly valued than we seem to be valuing it. If our present requirements of teaching, research and public service do not permit us to be both efficient and productive, then perhaps we should openly examine alternatives that have been offered, including multiple tenure track systems, departmentally centered strategic plans for teaching, research and public service or even voluntarily waiving the tenure system in favor of limited term appointments.

What makes each of these alternatives encouraging is that they recognize that individuals do not necessarily contribute equally to teaching, research and public service, and they offer the potential for change in the locus of decision-making about the balance of teaching, research and public service from the individual to the academic unit. In the multiple tenure track model, faculty make a determination about which component — teaching or research — they believe they have the most interest in and will make the greatest contribution toward. By selecting that track of interest, they make a commitment to a lifetime of scholarship by focusing their efforts on either teaching or research.

Departmental Strategic Plans

The departmentally centered strategic plan model recognizes that legitimate differences exist in faculty development needs throughout a faculty member's lifetime and determines how an individual faculty member can contribute in any given year toward an academic unit strategic plan. The academic unit, through the development of the strategic plan, is responsible for determining the overall balance of teaching, research and public service. The voluntary waiving of tenure for limited term appointments also recognizes that an individual faculty member's interests may change over time and posits that both the individual and the academic unit would benefit by evaluating the faculty member's contribution to the academic unit over a limited term such as six years.

Certainly it would be more efficient to let those who are interested in teaching spend their time in the classroom without worrying about research and publication, and let those who are interested in research spend their time in the lab without worrying about teaching, class preparation and advising. If we instituted such practices, we would see a fundamental shift in the allocation of time spent by faculty and an improvement in the product, but not a change in the total workload of faculty as reflected in the average 52 to 57 hours per week.

Financial Incentives

Boards, legislators and governors need to foster incentives to encourage faculty to teach, develop new curriculum and advise and mentor students. Two incentives have already been proven successful. First, we must reward teaching faculty with the same incentives that are provided for research faculty: remodeled teaching spaces, the latest in teaching laboratories and equipment, and teaching assistants to grade papers, meet with discussion groups, and advise individual students. Furthermore, state higher education policy makers should not ignore the positive lessons learned from incentive funding experiments in New Jersey, Ohio, Tennessee and Florida. The results were, and continue to be, positive. Important among those findings are:

- Incentive programs have strong appeal for business and political leaders because of their success in the business world.
- Incentive programs are designed to increase motivation to pursue a specific goal. Many have rewards for successful goal achievement. There is the added benefit of motivation for state leaders to set state priorities.
- Incentive programs are more effective in achieving objectives than are regulations when the regulator has limited control (National Center for Postsecondary Governance and Finance 1989).

The federal government and private industry have shown us that if we make competitive funding available to faculty, they will meet our expectations. If we want faculty to spend time in changing curriculum, developing new teaching techniques and improving the knowledge and skills of students, we should use the same methods the federal government and the private sector have used so successfully to lure faculty to the laboratory: make state and institutionally-funded competitive grants a part of our budgeting processes.

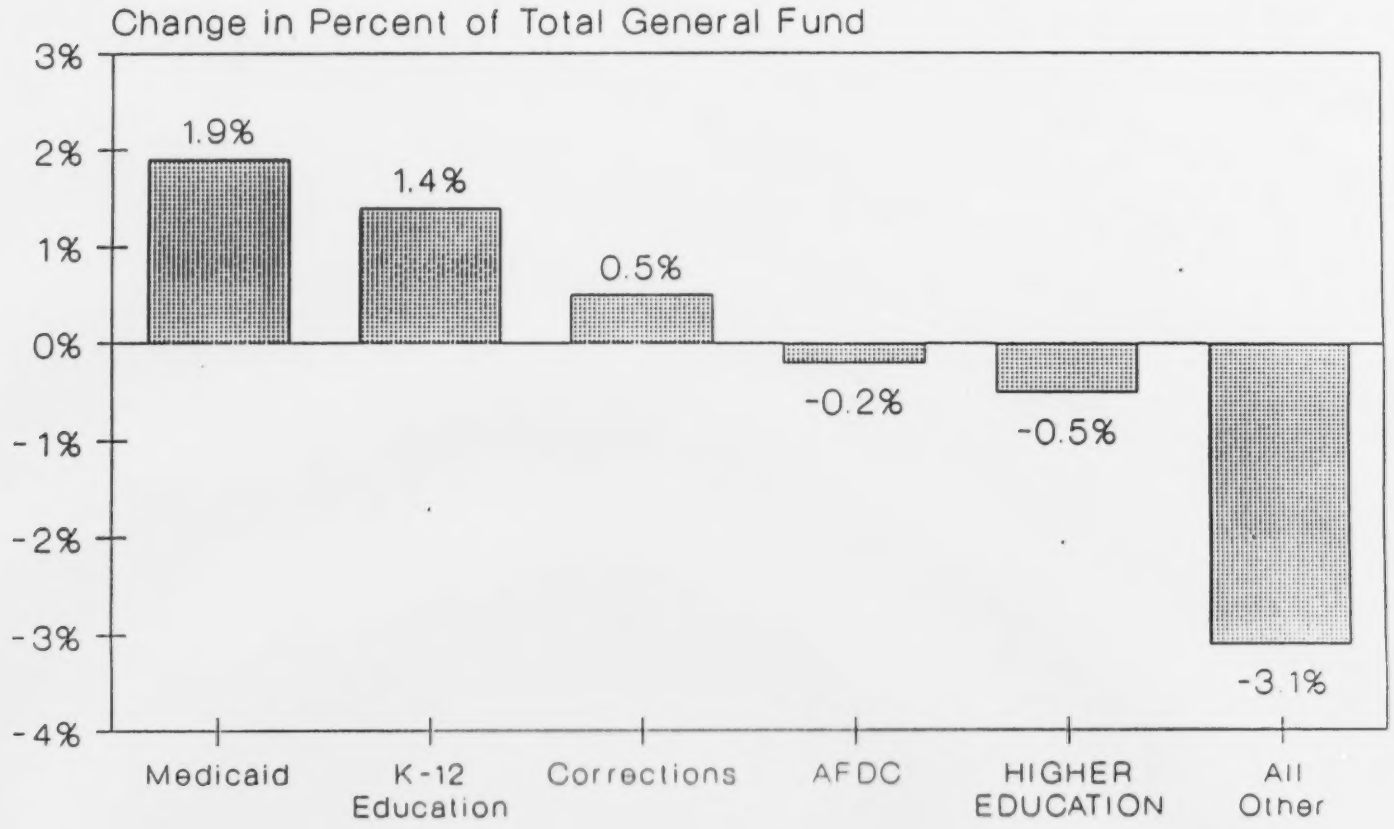
The Issue of Faculty Workload Within The Budget Context

In closing, we would like to remind ourselves why this notion of faculty workload is of growing importance. Most in the higher education community would agree that state support for higher education has waned in recent years (Jaschik 1992). At the same time, both public and private higher education institutions in many states are being asked to serve an ever increasing number of students. Higher education is only part of a myriad of state services — including health, welfare, corrections, and K-12 education — which compete for state funds. Further, these other areas have grown significantly in importance over the past decade and will continue to be important during the 1990s (see Figure 2).

The recent data on financing higher education clearly indicate that the spending increases enjoyed by higher education during the 1980s will most likely not return in the near future. Even when the economy rebounds and there are additional revenues, attention will likely be directed toward solving problems in health care delivery, prison overcrowding, and education reform efforts that have been unfunded during the past few years. Short of a windfall, the choices for higher education in the 1990s and beyond will be: (1) do more with less; (2) do the same with less; or (3) do less with less. The third alternative is politically the least viable. State legislators will not look favorably on attempts to serve fewer students. The outlook for the future will most likely involve the first two choices. A fundamental re-examination of faculty workload cannot be avoided under either of these alternatives.

Figure 2

Change in Share of General Fund Spending
FY 91 (Original) to FY 92 (Original)



Source: NCSL.

References

Arizona Joint Legislative Budget Committee. Faculty Teaching Loads at Arizona Universities (Unpublished document), February, 1992.

Brinkman, Paul, "Higher Education Cost Functions." In The Economics of American Universities: Management Operations and Fiscal Environment, Stephen A. Hoenack and Eileen Collins, eds. Albany: SUNY Press, 1990, Pages 107-128.

Decision Summary. Decision Summary on Enrollment Growth. Arizona Board of Regents, July, 1992.

Eckl, Corina, Anthony Hutchison, Ronald Snell. State Budget and Tax Actions: 1991, Legislative Finance Paper #79. Denver, CO: National Conference of State Legislatures, October, 1991.

Glidden, David. "The Incredible Shrinking Course Load At Pricey UC." The Los Angeles Times, March 22, 1992, p. M6.

Hines, Edward R. Higher Education and State Governments. ASHE-ERIC Higher Education Report No. 5, Washington, DC: Association for the Study of Higher Education, 1988.

Jacobson, Robert L. "Colleges Face New Pressure to Increase Faculty Productivity." Chronicle of Higher Education, April 15, 1992, pp. A1, A16-A18.

Jaschik, Scott. "1% Drop in State Support for Colleges Thought to Be First 2-Year Drop Ever." Chronicle of Higher Education, October 21, 1992, pp. A21, A26-A28.

Layzell, Daniel T. "Tight Budgets Demand Studies of Faculty Productivity." The Chronicle of Higher Education, February 19, 1992, pp. B2-B3.

Mingle, James R. and Charles S. Lenth. "A New Approach To Accountability and Productivity in Higher Education." Denver, CO: SHEEO, 1989.

MGT of America. Trends in State Appropriations for Public Higher Education. Olympia, WA: MGT of America, August 22, 1991.

National Center for Education Statistics. Profiles of Faculty in Higher Education Institutions, 1988, Publication NCES 91-389. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, August, 1991.

National Center for Postsecondary Governance and Finance. Summary of Materials on Incentive Funding. Conference on State Fiscal Incentives, Denver, CO: November, 1989.

Pascarella, Ernest T. and Terenzini, Patrick T. How College Affects Students: Findings and Insights from Twenty Years of Research. San Francisco: Jossey-Bass Publishers, 1991.

Pettit, Lawrence K. "Accountability In Higher Education." In, Perspectives On Higher Education Accountability, pp. 2-3. Washington, DC: American Association of State Colleges and Universities, 1991.

State Higher Education Executive Officers (SHEEO). The Dynamics of Academic Productivity. Proceedings of a seminar sponsored by the State Higher Education Executive Officers with William Massy and Robert Zemsky. Denver, CO: SHEEO, March, 1990.

Yuker, Harold. Faculty Workload: Research, Theory and Interpretation. ASHE-ERIC Higher Education Research Report No. 10. Washington, DC: Association for the Study of Higher Education, 1984.